

Title (en)
ANALOG/DIGITAL CONVERTER

Title (de)
ANALOG/DIGITAL-UMSETZER

Title (fr)
CONVERTISSEUR ANALOGIQUE/NUMERIQUE

Publication
EP 1885068 B1 20100310 (EN)

Application
EP 06731677 A 20060412

Priority
• JP 2006307731 W 20060412
• JP 2005155575 A 20050527

Abstract (en)
[origin: EP1885068A1] An A-D converter utilizing V-F conversion is realized that is capable of performing A-D conversion with high precision without increasing conversion frequency. Two VCOs are provided to find a V-F conversion value that is less than a period of the main VCO by making use of a period difference between the two VCOs. By counting the number of pulses in a pulse signal that is output from a BASE-VCO 1 with a counter 4, a high order bit of a digital signal is generated. A low order bit, on the other hand, is generated by calculating, for each sampling period, a phase difference from the beginning of a sampling period until a first pulse generation in the sampling period for the output of the BASE-VCO 1 by a third register 10 and second and third subtractors 11 and 12, based on the number of pulses in the output of the BASE-VCO 1 contained in a period from a current activation time point of sampling signal Ps to a time point at which phases of outputs of the BASE-VCO 1 and JAW-VCO 2 match.

IPC 8 full level
H03M 1/14 (2006.01); **H03M 1/60** (2006.01); **H03K 5/26** (2006.01)

CPC (source: EP KR US)
H03K 5/26 (2013.01 - KR); **H03M 1/14** (2013.01 - EP US); **H03M 1/60** (2013.01 - KR); **H03M 1/60** (2013.01 - EP US)

Cited by
DE102010027829A1

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)
EP 1885068 A1 20080206; EP 1885068 A4 20081105; EP 1885068 B1 20100310; AT E460775 T1 20100315; DE 602006012826 D1 20100422; JP 2006333203 A 20061207; JP 3701668 B1 20051005; KR 101237728 B1 20130226; KR 20080008313 A 20080123; US 2008036638 A1 20080214; US 7391353 B2 20080624; WO 2006126338 A1 20061130

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EP 06731677 A 20060412; AT 06731677 T 20060412; DE 602006012826 T 20060412; JP 2005155575 A 20050527; JP 2006307731 W 20060412; KR 20077002466 A 20060412; US 62865106 A 20060412